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#### What we claim is:

- A method of treating a subject requiring anti-oxidant therapy, comprising
  the steps of administering to a subject an effective amount of a lipid or
  phospholipid moiety bonded to a physiologically acceptable monomer,
  dimer, oligomer, or polymer, thereby treating the subject requiring
  anti-oxidant therapy.
- 2. A method as in claim 1 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid. didodecanoic acid. bile acid. cholic acid. cholesterylhemmisuccinate: or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondoitin-6-sulfate. chondroitin-4-sulfate. chondroitin. dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate. chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.
- 3. A method as in claim 1 wherein the lipid or phospholipid moiety is either phosphatidic acid, an acyl glycerol, monoacylglycerol, diacylglycerol, triacylglycerol. sphingosine. sphingomyelin. chondroitin-4-sulphate. chondroitin-6-sulphate, ceramide. phosphatidylethanolamine, phosphatidylserine. phosphatidylcholine. phosphatidylinositol. phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof. and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.

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- 4. A method of treating a subject requiring anti-TNF therapy, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject requiring anti-TNF therapy.
- 5. A method as in claim 4 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid dicarboxylic acid glutaric acid succinic acid fatty acid dodecanoic acid, didodecanoic acid, bile acid, cholic acid, cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide. a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondoitin-6-sulfate. chondroitin-4-sulfate. chondroitin dermatin. dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.
- 6. A method as in claim 4 wherein the lipid or phospholipid moiety is either phosphatidic acid, an acyl glycerol, monoacylglycerol, diacylglycerol, sphingosine. sphingomyelin. chondroitin-4-sulphate. triacylglycerol, ceramide. phosphatidylethanolamine. chondroitin-6-sulphate. phosphatidylcholine. phosphatidylinositol. phosphatidylserine. phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 7. A method of treating a subject suffering from a disorder of smooth muscle cell proliferation, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a

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physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with a disorder of smooth muscle cell proliferation.

- 8. A method as in claim 7 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid, bile acid, cholic acid, cholesterylhemmisuccinate: or wherein the physiologically acceptable dimer or oligomer is a dipeptide. a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin. chondoitin-6-sulfate. chondroitin-4-sulfate. dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol. polycarboxylated polyethylene glycol, chondroitin-6-sulfate. chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.
- 9. A method as in claim 7 wherein the lipid or phospholipid moiety is either phosphatidic acid, an acyl glycerol, monoacylglycerol, diacylglycerol, chondroitin-4-sulphate. triacylglycerol, sphingosine, sphingomyelin, chondroitin-6-sulphate, ceramide, phosphatidylethanolamine, phosphatidylserine, phosphatidylcholine, phosphatidylinositol. phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hvaluronic acid.
- 10. A method of treating a subject undergoing vascular catheterization, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject undergoing vascular catheterization.

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- 11. A method as in claim 10 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid. didodecanoic acid. bile acid. cholestervlhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.
- 12. A method as in claim 10 wherein the lipid or phospholipid moiety is either phosphatidic acid. an acyl glycerol, monoacylglycerol, triacylglycerol, diacylglycerol, sphingosine, sphingomyelin, chondroitin-4-sulphate. chondroitin-6-sulphate. ceramide. phosphatidylethanolamine. phosphatidylserine, phosphatidylcholine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 13. A method of treating a subject suffering from metastatic cancer, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with metastatic cancer.
- 14. A method as in claim 13 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic

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acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid. cholic dodecanoic acid. didodecanoic acid. bile acid. cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a alvcosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate. chondroitin-4-sulfate. keratin, keratin sulfate. heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.

- 15. A method as in claim 13 wherein the lipid or phospholipid moiety is phosphatidic acid. an acvl alvcerol. monoacylglycerol. either diacylglycerol, triacylglycerol, sphingosine. sphingomyelin. chondroitin-4-sulphate, chondroitin-6-sulphate. ceramide. phosphatidylserine. phosphatidylcholine. phosphatidylethanolamine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 16. A method of treating a subject suffering from obstructive respiratory disease, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with obstructive respiratory disease.
- 17. A method as in claim 16 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid, bile acid, cholic acid, cholesterylhemmisuccinate; or wherein the physiologically acceptable

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dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.

- 18. A method as in claim 16 wherein the lipid or phospholipid moiety is phosphatidic acid. an alvcerol. acvl monoacylglycerol. triacylglycerol. sphingomyelin, diacylalycerol. sphingosine. chondroitin-4-sulphate. chondroitin-6-sulphate. ceramide, phosphatidylethanolamine. phosphatidylserine. phosphatidylcholine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 19. A method of treating a subject suffering from colitis, Crohn's disease, or another form of intestinal mucosal injury, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with intestinal mucosal injury, including colitis or Crohn's disease.
- 20. A method as in claim 19 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid, bile acid, cholic acid, cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan

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sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.

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- 21. A method as in claim 19 wherein the lipid or phospholipid moiety is either phosphatidic acid, an acyl glycerol, monoacylglycerol. diacylglycerol. triacylglycerol. sphingosine, sphingomyelin. chondroitin-4-sulphate. chondroitin-6-sulphate, ceramide. phosphatidylethanolamine, phosphatidylserine, phosphatidylcholine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 22. A method of treating a subject suffering from cardiovascular disease, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with cardiovascular disease.
- 23. A method as in claim 22 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid, bile acid, cholic acid, cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a

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glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.

- 24. A method as in claim 22 wherein the lipid or phospholipid mojety is either phosphatidic acid. an acvl glycerol, monoacylglycerol. diacylglycerol. triacylglycerol. sphingosine, sphingomyelin, chondroitin-4-sulphate. chondroitin-6-sulphate, ceramide. phosphatidylethanolamine. phosphatidylserine, phosphatidylcholine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 25. A method of treating a subject suffering from atherosclerosis, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with atherosclerosis.
- 26. A method as in claim 25 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide. lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid. bile acid. cholic cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate.

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heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.

- 27. A method as in claim 25 wherein the lipid or phospholipid mojety is phosphatidic acid, an acvl alvcerol. monoacylglycerol. diacylglycerol. triacylglycerol. sphingosine. sphingomyelin. chondroitin-4-sulphate. chondroitin-6-sulphate, ceramide. phosphatidylethanolamine. phosphatidylserine. phosphatidylcholine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin. dextran, hemacell, hetastarch, or hyaluronic acid.
- 28. A method of treating a subject suffering from central nervous system tissue insult, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with central nervous system insult.
- 29. A method as in claim 28 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid, bile acid, cholic cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an olicopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose. heparin, dextran, or hyaluronic acid.

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- 30. A method as in claim 28 wherein the lipid or phospholipid moiety is either phosphatidic acid, an acyl glycerol, monoacylglycerol, diacylalycerol. triacylglycerol. sphingosine, sphingomyelin, chondroitin-4-sulphate. chondroitin-6-sulphate. ceramide. phosphatidylserine. phosphatidylcholine. phosphatidylethanolamine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 31. A method of treating a subject suffering from multiple sclerosis, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with multiple sclerosis.
- 32. A method as in claim 31 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid, bile acid, cholic cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid: or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.
- 33. A method as in claim 31 wherein the lipid or phospholipid moiety is either phosphatidic acid, an acyl glycerol, monoacylglycerol, diacylglycerol, triacylglycerol, sphingosine, sphingomyelin,

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- 34. A method of treating a subject suffering from contact dermatitis, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with contact dermatitis.
- 35. A method as in claim 33 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide. lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid. bile acid. cholic cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.
- 36. A method as in claim 33 wherein the lipid or phospholipid mojety is either phosphatidic acid. an acvl alvcerol. monoacylglycerol, diacylglycerol. triacylglycerol. sphingosine. sphingomyelin, chondroitin-4-sulphate, chondroitin-6-sulphate. ceramide. phosphatidylethanolamine, phosphatidylserine. phosphatidylcholine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl

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phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.

- 5 37. A method of treating a subject suffering from psoriasis, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with psoriasis.
  - 38. A method as in claim 37 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide. lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid. dodecanoic acid. didodecanoic acid. bile acid. cholic cholestervlhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.
- 39. A method as in claim 37 wherein the lipid or phospholipid moiety is 25 either phosphatidic acid. an acvl alvcerol. monoacylglycerol, diacylglycerol. triacylglycerol. sphingosine, sphingomyelin, chondroitin-4-sulphate. chondroitin-6-sulphate, ceramide, phosphatidylethanolamine, phosphatidylserine. phosphatidylcholine. 30 phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.

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- 40. A method of treating a subject suffering from a cellular proliferative disorder, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid molety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with a cellular proliferative disorder.
- 41. A method as in claim 39 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid, bile acid. cholic cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.
- 42. A method as in claim 39 wherein the lipid or phospholipid moiety is either phosphatidic acid. an acyl glycerol, monoacylglycerol, diacylglycerol. triacylglycerol, sphingosine, sphingomyelin, chondroitin-4-sulphate, chondroitin-6-sulphate. ceramide. phosphatidylethanolamine. phosphatidylserine, phosphatidylcholine, phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 43. A method of treating a subject suffering from sepsis, comprising the steps of administering to a subject an effective amount of a lipid or

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phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with sepsis.

- 44. A method as in claim 43 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid. didodecanoic acid. bile acid. cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.
- 45. A method as in claim 43 wherein the lipid or phospholipid moiety is either phosphatidic acid, an acyl glycerol, monoacylglycerol, diacylglycerol, triacylglycerol, sphingosine, sphingomyelin, chondroitin-4-sulphate, chondroitin-6-sulphate. ceramide, phosphatidylethanolamine. phosphatidylserine, phosphatidylcholine, phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose. glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 46. A method of treating a subject suffering from ARDS, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with ARDS.
  - 47. A method as in claim 46 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide,

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lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid, bile acid, cholic acid, cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.

- 48. A method as in claim 46 wherein the lipid or phospholipid mojety is phosphatidic acid. an acvl alvcerol. monoacylglycerol. diacylalycerol. triacylglycerol, sphingosine, sphingomyelin, chondroitin-4-sulphate. chondroitin-6-sulphate. ceramide. phosphatidylethanolamine. phosphatidylserine. phosphatidylcholine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 49. A method of treating a subject suffering from autoimmune disease, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with autoimmune disease.
- 50. A method as in claim 49 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid, bile acid, cholic acid,

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cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.

- 51. A method as in claim 49 wherein the lipid or phospholipid moiety is either phosphatidic acid. an acyl alvcerol. monoacylglycerol. diacylglycerol, triacylglycerol, sphingosine. sphingomyelin, chondroitin-4-sulphate, chondroitin-6-sulphate. ceramide. phosphatidylethanolamine. phosphatidylserine. phosphatidylcholine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 52. A method of treating a subject suffering from hemolysis, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject with hemolysis.
- 53. A method as in claim 52 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid, bile acid, cholic acid, cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate.

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chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.

- 54. A method as in claim 52 wherein the lipid or phospholipid moiety is either phosphatidic acid, an acyl glycerol, monoacylglycerol. diacylglycerol. triacylglycerol. sphingosine, sphingomyelin. chondroitin-4-sulphate, chondroitin-6-sulphate. ceramide. phosphatidylethanolamine, phosphatidylserine, phosphatidylcholine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, alutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 55. A method of treating a subject undergoing tissue transplantation or allograft rejection, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject undergoing tissue transplantation or allograft rejection.
- 56. A method as in claim 55 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid, bile acid, cholic acid, cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a

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glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.

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- 57. A method as in claim 55 wherein the lipid or phospholipid moiety is phosphatidic acid. an acyl glycerol, monoacylglycerol. diacylalycerol. triacylglycerol, sphingosine. sphingomyelin, chondroitin-4-sulphate. chondroitin-6-sulphate. ceramide. phosphatidylethanolamine. phosphatidylserine, phosphatidylcholine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 58. A method of treating a subject afflicted with HIV infection, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject afflicted with HIV infection.
- 59. A method as in claim 58 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid. didodecanoic acid. bile acid. cholic cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate,

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- heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.
- 60. A method as in claim 58 wherein the lipid or phospholipid moiety is phosphatidic acid, an acvl alvcerol. monoacylglycerol. diacylglycerol, triacylglycerol. sphingosine. sphingomyelin, chondroitin-4-sulphate. chondroitin-6-sulphate. ceramide. phosphatidylethanolamine. phosphatidylserine. phosphatidylcholine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 61. A method of treating a subject afflicted with conjunctivitis, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject afflicted with conjunctivitis.
- 62. A method as in claim 61 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid, didodecanoic acid, bile acid. cholic cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate. chondroitin-4-sulfate. keratin, keratin sulfate. heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose. heparin, dextran, or hyaluronic acid.

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- 63. A method as in claim 61 wherein the lipid or phospholipid mojety is either phosphatidic acid. an acvl alvcerol. monoacylglycerol. diacylglycerol, triacylglycerol. sphingosine, sphingomyelin. chondroitin-4-sulphate, chondroitin-6-sulphate. ceramide. phosphatidylethanolamine. phosphatidylserine, phosphatidylcholine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.
- 64. A method for extracorporeal tissue preservation, comprising the step of adding to a tissue preparation or organ an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby extending the viability of the tissue preparation or organ within a donor subject.
- 65. A method as in claim 64 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide. lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid. didodecanoic acid. bile acid. cholic cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an olidopeptide. or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate. heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.
- 66. A method as in claim 64 wherein the lipid or phospholipid moiety is either phosphatidic acid, an acyl glycerol, monoacylglycerol, diacylglycerol, triacylglycerol, sphingosine, sphingomyelin,

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chondroitin-4-sulphate, chondroitin-6-sulphate, ceramide, phosphatidylethanolamine, phosphatidylserine, phosphatidylcholine, phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.

- 67. A method of treating a subject afflicted with chlamydia infection, comprising the steps of administering to a subject an effective amount of a lipid or phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, thereby treating the subject afflicted with chlamydia infection.
- 68. A method as in claim 67 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid. didodecanoic acid. bile acid. cholic acid. cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a alvcosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.
- 69. A method as in claim 67 wherein the lipid or phospholipid moiety is phosphatidic acid. an acyl glycerol. monoacylglycerol. diacylglycerol. triacylalycerol. sphingosine. sphingomyelin. chondroitin-4-sulphate. chondroitin-6-sulphate, ceramide. phosphatidylethanolamine. phosphatidylserine. phosphatidylcholine. phosphatidylinositol, or phosphatidylglycerol, or an ether or alkyl

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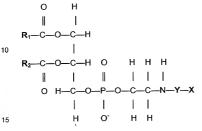
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phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hyaluronic acid.

## 70. A compound according to the formula

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#### wherein

R<sub>1</sub> is a linear, saturated, mono-unsaturated, or poly-unsaturated, alkyl chain ranging in length from 2 to 30 carbon atoms;

R<sub>2</sub> is a linear, saturated, mono-unsaturated, or poly-unsaturated, alkyl chain ranging in length from 2 to 30 carbon atoms;

Y is either nothing or a spacer group ranging in length from 2 to 30 atoms: and

X is either a mono- or disaccharide, carboxylated disaccharide, monoor dicarboxylic acids, a salicylate, salicylic acid, aspirin, lactobionic acid, maltose, an amino acid, glycine, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid. bile acid. cholic acid. acid. didodecanoic cholesterylhemmisuccinate, a di- or tripeptide, an oligopeptide, a trisacharide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hvaluronic acid.

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# 71. A compound according to the formula

### wherein

 $\mathbf{R}_1$  is a linear, saturated, mono-unsaturated, or poly-unsaturated, alkyl chain ranging in length from 2 to 30 carbon atoms;

 $\mathbf{R}_2$  is a linear, saturated, mono-unsaturated, or poly-unsaturated, alkyl chain ranging in length from 2 to 30 carbon atoms;

Y is either nothing or a spacer group ranging in length from 2 to 30 atoms; and

X is either a mono- or disaccharide, carboxylated disaccharide, monoor dicarboxylic acids, a salicylate, salicylic acid, aspirin, lactobionic acid, maltose, an amino acid, glycine, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic cholic acid. didodecanoic acid. bile acid. acid. cholesterylhemmisuccinate, a di- or tripeptide, an oligopeptide, a trisaccharide, or a di- or trisaccharide monomer unit of heparin, keratin. keratan sulfate. chondroitin, heparan sulfate, chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid.

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## 72. A compound according to the formula

wherein

 $R_1$  is a linear, saturated, mono-unsaturated, or poly-unsaturated, alkyl chain ranging in length from 2 to 30 carbon atoms;

 $\mathbf{R}_2$  is a linear, saturated, mono-unsaturated, or poly-unsaturated, alkyl chain ranging in length from 2 to 30 carbon atoms;

Z is either choline, inositol, or glycerol;

Y is either nothing or a spacer group ranging in length from 2 to 30 atoms; and

X is either a mono- or disaccharide, carboxylated disaccharide, monoor dicarboxylic acids, a salicylate, salicylic acid, aspirin, lactobionic acid, maltose, an amino acid, glycine, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid. didodecanoic acid. bile acid. cholic acid. cholesterylhemmisuccinate, a di- or tripeptide, an oligopeptide, a trisaccharide, or a di- or trisaccharide monomer unit of heparin, sulfate. keratin. keratan sulfate. chondroitin. heparan chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid.

# 73. A compound according to the general formula

wherein

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 $\mathbf{R}_1$  is a linear, saturated, mono-unsaturated, or poly-unsaturated, alkyl chain ranging in length from 2 to 30 carbon atoms;

 $\mathbf{R}_2$  is a linear, saturated, mono-unsaturated, or poly-unsaturated, alkyl chain ranging in length from 2 to 30 carbon atoms ;

Z is either ethanolamine, serine, inositol, choline, or glycerol;

 ${\bf Y}$  is either nothing or a spacer group ranging in length from 2 to 30 atoms; and

X is either a mono- or disaccharide, carboxylated disaccharide, monoor dicarboxylic acids, a salicylate, salicylic acid, aspirin, lactobionic acid, maltose, an amino acid, glycine, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid. cholic acid, acid. bile didodecanoic acid. cholesterylhemmisuccinate, a di- or tripeptide, an oligopeptide, a trisaccharide, or a di- or trisaccharide monomer unit of heparin, sulfate. chondroitin, keratin. keratan heparan sulfate. chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid.

### 74. A compound according to the general formula

wherein

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 $R_1$  is a linear, saturated, mono-unsaturated, or poly-unsaturated, alkyl chain ranging in length from 2 to 30 carbon atoms;

 ${f R}_2$  is a linear, saturated, mono-unsaturated, or poly-unsaturated, alkyl chain ranging in length from 2 to 30 carbon atoms ;

Z is either ethanolamine, serine, inositol, choline, or glycerol;

Y is either nothing or a spacer group ranging in length from 2 to 30 atoms; and X is either a mono- or disaccharide, carboxylated disaccharide, mono- or dicarboxylic acids, a salicylate, salicylic acid, aspirin, lactobionic acid, maltose, an amino acid, glycine, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid. didodecanoic acid. bile acid. cholic acid. cholesterylhemmisuccinate, a di- or tripeptide, an oligopeptide, a trisaccharide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate. keratin. keratan sulfate. chondroitin. chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid.

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## 75. A compound according to the formula

## wherein

 $R_1$  is a linear, saturated, mono-unsaturated, or poly-unsaturated, alkyl chain ranging in length  $\,$  from 2 to 30 carbon atoms;

 $\mathbf{R}_2$  is a linear, saturated, mono-unsaturated, or poly-unsaturated, alkyl chain ranging in length from 2 to 30 carbon atoms ;

Z is either choline, inositol, or glycerol;

Y is either nothing or a spacer group ranging in length from 2 to 30 atoms; and

X is either a mono- or disaccharide, carboxylated disaccharide, monoor dicarboxylic acids, a salicylate, salicylic acid, aspirin, lactobionic acid, maltose, an amino acid, glycine, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic acid. acid, bile acid. cholic acid. didodecanoic cholesterylhemmisuccinate, a di- or tripeptide, an oligopeptide, a trisaccharide, or a di- or trisaccharide monomer unit of heparin, keratin keratan sulfate. chondroitin. heparan sulfate. chondoitin-6-sulfate, chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid.

76. Use of a phospholipid moiety bonded to a physiologically acceptable monomer, dimer, oligomer, or polymer, in the preparation of a pharmaceutical composition for treating a subject afflicted with obstructive

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respiratory disease, colitis, Crohn's disease, central nervous system insult, multiple sclerosis, contact dermatitis, psoriasis, cardiovascular disease, including prophylaxis for invasive procedures, invasive cellular proliferative disorders, anti-oxidant therapy, hemolytic syndromes, sepsis, acute respiratory distress syndrome, tissue transplant rejection syndromes, autoimmune disease, viral infection, and hypersensitivity conjunctivitis.

- 77. The use as in claim 76 wherein the physiologically acceptable monomer is either a salicylate, salicylic acid, aspirin, a monosaccharide, lactobionic acid, maltose, an amino acid, glycine, carboxylic acid, acetic acid, butyric acid, dicarboxylic acid, glutaric acid, succinic acid, fatty acid, dodecanoic bile acid. cholic acid. didodecanoic acid. acid. cholesterylhemmisuccinate; or wherein the physiologically acceptable dimer or oligomer is a dipeptide, a disaccharide, a trisaccharide, an oligopeptide, or a di- or trisaccharide monomer unit of heparin, heparan sulfate, keratin, keratan sulfate, chondroitin, chondoitin-6-sulfate. chondroitin-4-sulfate, dermatin, dermatan sulfate, dextran, or hyaluronic acid; or wherein the physiologically acceptable polymer is a glycosaminoglycan, polygelin ('hemaccell'), alginate, hydroxyethyl starch (hetastarch), polyethylene glycol, polycarboxylated polyethylene glycol, chondroitin-6-sulfate, chondroitin-4-sulfate, keratin, keratin sulfate, heparan sulfate, dermatin, dermatan sulfate, carboxymethylcellulose, heparin, dextran, or hyaluronic acid.
- 78. The use as in claim 76 wherein the lipid or phospholipid moiety is either phosphatidic acid, an acyl glycerol, monoacylglycerol, diacylglycerol, triacylglycerol, sphingosine, sphingomyelin, chondroitin-4-sulphate, phosphatidylethanolamine, chondroitin-6-sulphate, ceramide. phosphatidylserine, phosphatidylcholine. phosphatidylinositol. phosphatidylglycerol, or an ether or alkyl phospholipid derivative thereof, and the physiologically acceptable monomer or polymer moiety is either aspirin, lactobionic acid, maltose, glutaric acid, polyethylene glycol, carboxymethylcellulose, heparin, dextran, hemacell, hetastarch, or hvaluronic acid.

79. Use of a pharmaceutical composition as in claims 76-78 for treating a subject afflicted with obstructive respiratory disease, colitis, Crohn's disease, central nervous system insult, multiple sclerosis, contact dermatitis, psoriasis, cardiovascular disease, including prophylaxis for invasive procedures, invasive cellular proliferative disorders, anti-oxidant therapy, hemolytic syndromes, sepsis, acute respiratory distress syndrome, tissue transplant rejection syndromes, autoimmune disease, viral infection, or hypersensitivity conjunctivitis, wherein the composition is prepared for administration by topical, oral, nasal, aerosol, intravenous, intraocular, intra-arterial, subcutaneous, or suppository routes.